

Amendments to the Claims:

10/523831
BT01 Rec'd PCT/PTG 08 FEB 2005

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) Dimensional weighing apparatus for use with object weighing apparatus and object pricing apparatus, the dimensional weighing apparatus including:
sensing apparatus for determining size data for an object to be weighed; and
control apparatus which receives size data from the sensing apparatus and which includes an interface for communicating with the weighing apparatus and an interface for communicating with the pricing apparatus;
the control apparatus in use being connected between the weighing and pricing apparatus, and outputting weight information to the pricing apparatus dependent on weight data from the weighing apparatus and size data from the sensing apparatus.
2. (Original) The apparatus of claim 1, wherein the control apparatus determines a dimensional weight for the object based on the size data, and outputs the larger of the dimensional weight and an actual weight of the object as determined from the weight data.
3. (Canceled)
4. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus is adapted to determine the size of the object whilst the object is on the weighing apparatus.
5. (Canceled)

6. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus includes non-contact type sensors.

7. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus includes sensors that sense a distance to the object.

8. (Canceled)

9. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus includes one or more vertically-oriented sensors arranged in use over the object and/or one or more horizontally-oriented sensors.

10. (Canceled)

11. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus and object rotate in use relative to one another.

12. (Currently Amended) The apparatus of ~~any preceding claim~~ claim 1, including a turntable on which the object is placed for size determination the turntable being adapted to be mounted in use on the weighing apparatus.

13. (Canceled)

14. (Currently Amended) The apparatus of claim 12 ~~or 13~~, wherein the turntable is connected to the control apparatus, and is activated by a signal from the control apparatus.

15.-17. (Canceled)

18. (Currently Amended) The apparatus of claim 12 ~~any of claims 12 to 17~~, wherein the control apparatus correlates the size data with the rotational position of the turntable in order to determine a cross-sectional profile for the object.

19. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus provides data on at least one cross-sectional profile of the object and at least one height measurement of the object.

20. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus determines size data for a 360-degree profile of the object.

21. (Currently Amended) The apparatus of claim 19 ~~or 20~~, wherein the control apparatus identifies the shape of the object through the peaks and/or troughs in the cross-sectional profile.

22. (Original) The apparatus of claim 21, wherein the control apparatus determines dimensions of the object cross-section based on the identified shape of the object, and on the dimension data for the object determined at the peaks and/or troughs of the profile.

23. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the control apparatus determines cross-sectional profile data for the object and fits a minimum-area polygon to the profile data.

24.-27. (Canceled)

28. (Currently Amended) The apparatus of claim 1 ~~any preceding claim~~, wherein the sensing apparatus includes one or more reflector elements for directing a sensing beam from a sensor onto an object to be measured.

29. (Canceled)

30. (Original) Computer software for determining a dimensional weight of an object, the software including a component for receiving actual weight data of an object, a component for receiving size data for the object, a component for determining a dimensional weight for the object based on the size data, and a component for outputting weight data for the object based on the actual weight data and the dimensional weight.

31.-32. (Canceled)

33. (Original) A method of determining the dimensional weight of an object, the method including the steps of using one or more sensors to obtain size data of an object, using the size data to determine a dimensional weight of the object, intercepting actual weight data of the object from a set of scales, and outputting weight data to a pricing apparatus based on the actual and dimensional weights.

34. (Currently Amended) The method of claim 33, including the step of providing a turntable on said set of scales, and obtaining said size data of the object as it is rotated on the weighing apparatus. A method of determining the dimensional weight of an object, the method including the steps of providing a turntable on weighing apparatus, and using one or more sensors to obtain size data of the object as it is rotated on the weighing apparatus during the weighing process, obtaining the size data and the output of the weighing apparatus in order to determine a dimensional weight and an actual weight of the object, and outputting weight data to a pricing apparatus based on the actual and dimensional weights.

35.-37. (Canceled)

38. (Original) Dimensional weighing apparatus including sensor means for obtaining a profile of distances between a reference point and the surface of an object in a cross-sectional plane of the object in a number of angular directions, and means for analysing the profile in order to determine dimensions of the object in that cross-sectional plane.

39.-40. (Canceled)

41. (Original) Dimensional weighing apparatus including weighing apparatus for weighing an object, sensor apparatus for providing information on the size of the object, and a controller for determining a dimensional weight of the object based on the size information and for determining the actual weight of the object from an output of the weighing apparatus.

42. (Original) The apparatus of claim 41, wherein the object and sensor apparatus are rotated relative to one another in order to obtain the size information.

43. (Currently Amended) The apparatus of claim 41-~~or~~ 42, wherein the sensor apparatus includes one or more cameras that take images of the object.

44. (Currently Amended) The apparatus of claim 41, ~~42 or 43~~, wherein the controller determines a cross-sectional profile of the object.

45. (Original) The apparatus of claim 44, wherein the controller determines a minimum area polygon into which the cross-sectional profile fits.

46.-52. (Canceled)